

WINSTAR Display

OLED SPECIFICATION

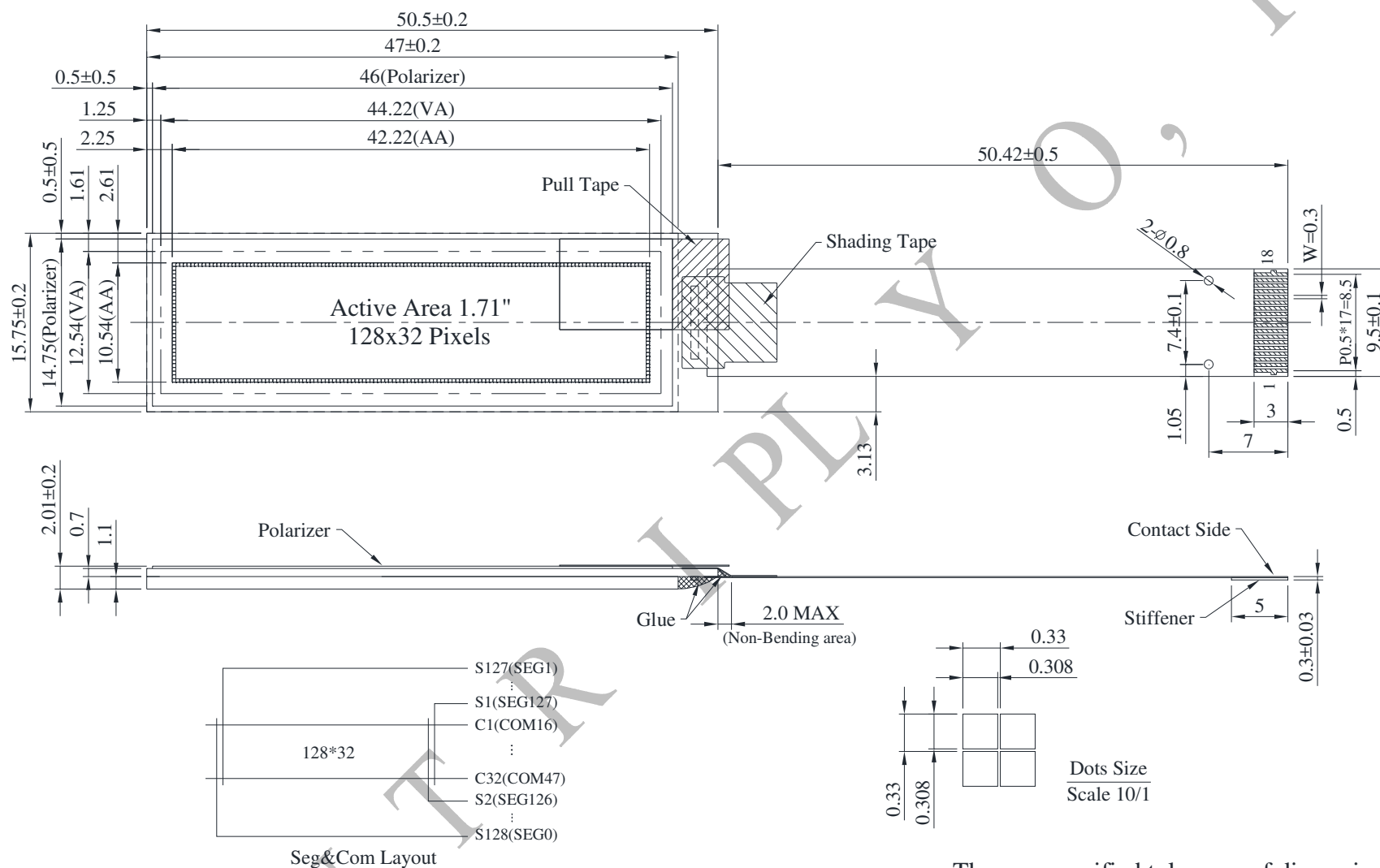
Model No:

WEO012832P

General Specification

Item	Dimension	Unit
Dot Matrix	128 x 32 Dots	—
Module dimension	50.50 x 15.75 x 2.01	mm
Active Area	42.22 x 10.54	mm
Pixel Size	0.308 x 0.308	mm
Pixel Pitch	0.33 x 0.33	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/32 Duty	
IC	CH1115	
Interface	SPI,I2C	
Size	1.71 inch	

Contour Drawing & Block Diagram



PIN	SYMBOL
1	ESD_GND
2	VPP
3	VSS
4	VSS
5	VDD
6	/CS
7	/RES
8	A0
9	SCL
10	SI/SDA
11	NC
12	IREF
13	VCOMH
14	VPP
15	IM0
16	IM1
17	VSS
18	ESD_GND

The non-specified tolerance of dimension is ±0.3 mm .

Interface Pin Function

No.	Symbol	Function
1	ESD_GND	ESD Ground pin
2	VPP	OLED panel power supply.
3	VSS	This is a ground pin.
4	VSS	This is a ground pin.
5	VDD	Power Supply for Logic
6	$\overline{CS}$	This pad is the chip select input. When $\overline{CS}$ = "L", then the chip select becomes active, and data/command I/O is enabled.
7	$\overline{RES}$	This is a reset signal input pad. When $\overline{RES}$ is set to "L", the settings are initialized. The reset operation is performed by the $\overline{RES}$ signal level.
8	A0	This is the Data/Command control pad that determines whether the data bits are data or a command. In I2C interface, this pad serves as SA0 to distinguish the different address of OLED driver.
9	SCL	The serial clock input pad
10	SI/SDA	The serial data input pad
11	NC	Dummy Pin
12	IREF	This is a segment current reference pad. A resistor should be connected between this pad and VSS. Set the current at $18.75 \mu A$.
13	VCOMH	The pin is for COM signal deselected voltage level. A capacitor should be connected between this pin and VSS.
14	VPP	OLED panel power supply.

15	IM0	These are the MPU interface mode select pads.			
		3SPI	4SPI	I2C	
16	IM1	IM0	1	0	0
		IM1	0	0	1
17	VSS	This is a ground pin.			
18	ESD_GND	ESD Ground pin			

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	-0.3	3.6	V
Supply Voltage for Display	VPP	-0.3	14.5	V
Operating Temperature	TOP	-40	+80	°C
Storage Temperature	TSTG	-40	+85	°C

Electrical Characteristics

DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage for Logic	VDD	—	1.65	3.0	3.3	V
Supply Voltage for Display	VPP	—	6.4	12.0	12.5	V
High Level Input	VIH	—	$0.8 \times VDD$	—	VDD	V
Low Level Input	VIL	—	VSS	—	$0.2 \times VDD$	V
High Level Output	VOH	—	$0.8 \times VDD$	—	VDD	V
Low Level Output	VOL	—	VSS	—	$0.2 \times VDD$	V
Display 50% Pixel on	IPP	VPP=12V	—	5	10	mA